

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

REC'D 31 MAY 2005

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PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/002562

International filing date (day/month/year)
10.03.2005

Priority date (day/month/year)
01.04.2004

International Patent Classification (IPC) or both national classification and IPC
H04L1/18

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/002562

Box No. 1 Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.
PCT/EP2005/002562

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,8-17,19,20,23,27-29
	No: Claims	1,3,4,5,6,7,18,22,24,25,26
Inventive step (IS)	Yes: Claims	9-17,19,20
	No: Claims	2,8,21,27,28,29
Industrial applicability (IA)	Yes: Claims	1-29
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the International application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re point V:

- 1). The following documents are referred to:

D1: EP-A-1 244 240 (LG ELECTRONICS INC) 25 September 2002 (2002-09-25)
D2: DE 101 08 800 A (SIEMENS AG) 5 September 2002 (2002-09-05)
D3: US-A-5 657 325 (LOU HUI LING ET AL) 12 August 1997 (1997-08-12)
D4: US 2003/088822 A1 (KIM HUN-KEE ET AL) 8 May 2003 (2003-05-08)

- 2). The subject-matter of claims 1, 3, 4, 5, 6, 7, 18, 21, 22, 23, 24, 25 and 26 is not new in the sense of Article 33(2) PCT. Furthermore, the subject-matter of claims 2, 8, 27, 28 and 29 lacks inventive step (Article 33(3) PCT).

- 3). Document D1 discloses (the references in parentheses applying to this document):

A method for transmitting data packets from a mobile terminal to a base station using a hybrid automatic repeat request protocol and soft combining of received data (paragraphs [0001], [0012]-[0013], [0223]), the method comprising the steps of:

transmitting a data packet from the mobile terminal to the base station via a first data channel (paragraph [0111], R-PDCH),

receiving a feedback message (ACK/NAK) from the base station at the mobile terminal, wherein the feedback message indicates whether the data packet has been successfully received by the base station,

in case the feedback message indicates that the data packet has not been received successfully, transmitting the retransmission data packet from the mobile terminal to the base station via a second data channel (paragraph [0111], R-NPDCH).

The subject-matter of claim 1 is therefore not new.

- 4). It is noted for the sake of completeness that the subject-matter of claim 1 also reads onto the teachings of D2 and D3 (see passages cited in the search report).

- 5). Insofar as D1 relates to a CDMA-2000 system the expression "terminal" used in D1 is to be understood as *mobile* terminal. Furthermore, the "base transceiver system" of D1 evidently is identical to a base station. Thus the subject-matter of independent claims 22, 24 and 26 also lacks novelty over at least D1.
- 6). The subject-matter of independent claims 27 and 28 is considered to lack inventive step, since it is well-known that processors such as those commonly found in mobile terminals require stored program code for their operation.
- 7). Turning to the dependent claims: claims 3, 4, 5, 6 and 18, 23, 25 and 26 also lack novelty.
Claims 3 and 4: see e.g. D1, paragraph [0037].
Claim 5: see e.g. D1, paragraphs [0025] to [0028] and paragraphs [0223] and [0224].
Claim 6: see e.g. D1, paragraphs [0150] to [0152].
Claim 7: see e.g. D1, paragraph [0036] and Fig. 2.
Claim 18: is implicit from the whole context of D1.
Claim 23: this is tautological, since its subject-matter is already effectively covered by claim 22. It lacks novelty for the same reason.
Claim 25: this is also tautological, since its subject-matter is already effectively covered by claim 24. It lacks novelty for the same reason.
- 8). The subject-matter of claim 8 is considered to lack inventive step. It is an obvious design detail in an essentially synchronous system to retransmit a fixed time after the ACK/NAK feedback.
- 9). The subject-matter of claims 2 and 29 lacks inventive step over a combination of D1 and D4. D4 (see paragraph [0030]) suggests that the TTI might be changed (implicitly, increased) between transmission and retransmission. D4 recognizes that this would be rather difficult but, nonetheless notes that there would be system performance advantages. The skilled person, in knowledge also of the teaching of D1 would understand that, where the retransmission is performed on a different channel from the initial transmission, the TTI could more readily be of different length and thus the advantage discussed by D4 could be realised.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2005/002562

- 10). The subject-matter of claim 21 lacks inventive step since it is merely a matter of conventional nomenclature to characterise the data channels as transport channels.
- 11). The subject-matter of claim 9 (also of claims 10-17 which are dependent on claim 9) and claims 19 and 20 relating respectively to the control message indicating the amount of information to be retransmitted and to the determination of that amount, does not appear at this juncture to be disclosed or rendered obvious by the available prior art.

Re point VIII:

- 1). Claims 27 and 28 are identical and therefore the requirement of conciseness of Article 6 PCT is not met.

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